

IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1. (Withdrawn) A scaffold for at least one of: tissue regeneration and bone growth; the scaffold being fabricated from at least two polymers; a first polymer of the at least two polymers being able to be leached by a solvent, and all other polymers of the at least two polymers being selected from the group consisting of: inert to the solvent, and having a lower dissolution rate in the solvent, wherein leaching of the first polymer is controlled so that leaching is maximized at a surface of the scaffold, and minimized at a core of the scaffold.
2. (Withdrawn) The scaffold according to claim 1, wherein the polymers are of differing rates of bio-degradability.
3. (Withdrawn) A scaffold according to claim 1, wherein the scaffold has a graded porosity with high porosity at a surface of the scaffold, and low porosity at a core of the scaffold.
4. (Withdrawn) A scaffold as claimed in claim 1, wherein the at least two polymers are selected from the group consisting of: natural polymers, a blend of natural polymers and synthetic polymers, synthetic polymers, polyglycolide, polylactide, poly L-lactide, poly DL-lactide, polylactide co-glycolide, polycaprolactone, and polyhydroxybutrate.

5. (Withdrawn) A scaffold as claimed in claim 1, wherein the solvent is selected from the group consisting of: organic solvent, and inorganic solvent.
6. (Withdrawn) A scaffold as claimed in claim 5, wherein the organic solvent is selected from the group consisting of: acetone, dichloromethane, hex-fluoroisopropanol, chloroform, and alcohol.
7. (Withdrawn) A scaffold as claimed in claim 1, wherein there are two polymers in a ratio in the range 60:40 to 30:70.
8. (Currently amended) A method of fabrication of a scaffold for at least one of: tissue regeneration and bone growth; the method comprising:
- (a) blending at least two polymers to form a polymer blend;
 - (b) forming the scaffold from the polymer blend; and
 - (c) leaching the scaffold in an ultrasonic bath of solvent ~~using a solvent~~ to remove a first polymer of the at least two polymers, all other polymers of the at least two polymers being inert to the solvent,
- wherein leaching of the first polymer is controlled so that leaching removal of the first polymer occurs to a greater extent ~~is maximized~~ at a surface of the scaffold, and to a lesser extent ~~minimized~~ at a core of the scaffold.
9. (Previously presented) A method as claimed in claim 8, wherein all polymers of the at least two polymers all have a different rate of biodegradability.

10. (Previously presented) A method as claimed in claim 8, wherein there are two polymers in a ratio in the range 60:40 to 30:70.
11. (Previously presented) A method as claimed in claim 8, wherein the at least two polymers are selected from the group consisting of: natural polymers, a blend of natural polymers and synthetic polymers, synthetic polymers, polyglycolide, polylactide, poly L-lactide, poly DL-lactide, polylactide co-glycolide, polycaprolactone, and polyhydroxybutrate.
12. (Previously presented) A method as claimed in claim 8, wherein the solvent is selected from the group consisting of: acetone, dichloromethane, hexfluoroisopropanol, chloroform, and alcohol.
13. (Currently amended) A method as claimed in claim 8, wherein the forming is by at least one method selected from the group consisting of: compression moulding, injection moulding, rapid prototyping, and three dimensional printing.
14. (Previously presented) A method as claimed in claim 13, wherein compression moulding is at a pressure in the range 0 to 20 Mpa, and at a temperature in the range 25°C to 80°C.
15. (Previously presented) A method as claimed in claim 9, wherein the first polymer has a faster rate of bio-degradability.
16. (Canceled).

17. (Currently amended) A method as claimed in claim 8 [[16]], wherein the solvent is at a temperature in the range 25°C to 50°C, frequencies being in the range 1KHz to 40KHz, and exposure time being in the range 5 minutes to 120 minutes.
18. (Previously presented) A method as claimed in claim 8, wherein the at least two polymers are milled prior to blending, milling and blending being in a cryogenic mill to form a particle size in the range 20 to 500µm.
19. (Previously presented) A method as claimed in claim 18, wherein the milling is at a cycle dependent upon at least one of: the type of the at least two polymers, and a desired particle size of the at least two polymers.
20. (Previously presented) A method as claimed in claim 18, wherein milling is at a frequency in the range 15 to 30 cycles of one minute each.
21. (Previously presented) A method as claimed in claim 18, wherein during milling, an impaction rate is 15 impacts/second.
22. (Currently amended) A method as claimed in claim 8, wherein the leaching produces a scaffold ~~has a~~ graded porosity in the scaffold with a higher porosity at the [[a]] surface of the scaffold, and a lower porosity at the [[a]] core of the scaffold.

23. (Previously presented) A method as claimed in claim 8, wherein leaching includes: removal, and dissolution.

24. (Withdrawn) A scaffold when fabricated by the method of claim 8.

25. (Withdrawn) A scaffold as claimed in claim 24, wherein leaching includes: removal, and dissolution.